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ORIGINAL ARTICLES.

A Few Suggestions on the After Treatment Following Surgery in the Abdomen.

BY M. B. WARD, M.D., TOPEKA, KAS.

Read before the Central Branch Medical Society, at Greenleaf, Kas., September 6, 1894.

No feature of my experience in abdominal and pelvic surgery gives me greater anxiety than the proper management of the patient after the operation.

I shall at this time make a few observations, the results of my experience, in order that I may comply with the request of your secretary, Dr. Armstrong, suggesting that I read a paper on this subject.

Dr. O. W. Holmes says the "child's training should begin one hundred years before birth." In surgery of the abdomen we need not go back quite that far, but the after treatment should begin two or three days prior to the operation and continue until the patient is fully restored. The thought is just this: The character of the after treatment will depend, to some extent at least, on the preparation of the patient for the operation.

In view of the fact that upon the general practitioner will rest the responsibility of preparing the patient for the specialist, in cases where the surgery is performed at the home of the patient, I cannot permit the opportunity to pass without saying a word on this subject before passing to the consideration of the after treatment.

Every patient must be treated as an independent factor, and therefore we cannot make rules that will apply to all cases.

In order that I may be brief permit me to consider three hypothetical cases.

Case 1 is a patient referred to the specialist with the following history: Mr. B., aged 35, always quite healthy until three days ago, when he began to complain of severe pain in the region of the cæcum, which increased rapidly, and the entire abdomen was soon tender and painful. Soon after the pain developed he was seized with a chill, and chilly creepings continued nearly constantly. The pain increased until the suffering was terrible. The temperature was found on the second day to be 103° F. It was found necessary to administer morphia in large doses, which only partly controlled the suffering. As soon as seen by the physician he was given large doses of salts, but they failed to operate effectually and injections in the colon were resorted to in order to secure a bowel movement. Nothing seemed to avail in this case, and the patient failing rapidly the surgeon is called. He finds on the third day a pulse of 140, temperature 104° F., distended and tender abdomen, and recommends, very promptly, that an operation be performed as soon as it is possible to prepare the patient. What preparation shall be given the patient? I answer none, save the thorough yet careful scrubbing of the field of operation.

No thorough or systematic preparation is expedient or possible.

Case 2: Mrs. C., age 55 years, mother of several children; gives a history of fair health until five years since, when the menopause was completed. About this time she noticed that the uterus was growing and causing her to have an unpleasant weight in her pelvis—and some months after this there was a severe hemorrhage. Her history shows that the tumor has grown steadily and persistently, accompanied by frequent

bleedings, and now she is referred to the specialist for a surgical operation. We find her very greatly reduced, almost bloodless, nothing but skin and bones, save the tumor, which has filled the entire abdomen, and upon examination it is diagnosticated a solid tumor of uterus, and hysterectomy is recommended.

What preparation shall we give the patient?

Nothing should be done that will in the least deplete this already exsanguinated woman. We must give her strych., beef juice and predigested milk, and bathe her with alcohol, and give her alcoholic stimulants.

As soon as she responds to the increased nourishment she should be hastily prepared for operation, and without any (save a few hours) of abstinence from food, and no physic, if the bowels have been acting with regularity.

Case 3: Mrs. D., age 35, mother of three living children, and gives a history of three miscarriages. Her labors were tedious and convalescence each time slow. After her last miscarriage, which occurred one year prior to her consultation, she has been failing in health, and suffering almost constantly. She refers to her pelvic organs as the seat of her principal suffering, although there are many nervous complications that affect her. They are evidently caused by her pelvic disease. She is not greatly reduced in strength and flesh. She suffers most when obliged to ride in street cars or over rough roads in a wagon. Gives history of several attacks of peritonitis.

Upon examination we find large masses in the pelvis, the uterus is retroflexed and firmly adherent, and recommend that nothing but an operation will cure the patient.

The preparation of this patient should be most thorough.

The alimentary canal should be made as clean as wax. The diet should be restricted to liquid food for thirty-six or forty-eight hours prior to operation. For twelve hours she should have no food save a cup of weak tea or coffee. The other preparations are much the same as in all cases.

I have referred to these three cases as fair types of the various conditions of patients as they come to us for surgery of the abdomen. The last case mentioned is the only one that would bear an ideal preparation.

We are now ready to consider the after treatment.

This subject presents so many aspects, I can only hope to mention general rules.

The most valuable suggestion at my command is to urge you to insist on having a thoroughly trained and competent nurse in all cases when it is possible. Nurses can be nearly always procured, and for a sum within the means of even the improvident. One week of judicious attention by a competent nurse will save patients that would perish if left to the care of those inexperienced in this special work.

I am almost afraid to do abdominal surgery without my patient can have the care, for a few days at least, of a nurse whose training has been along the line of abdominal surgery.

One of the most perplexing features in the after care is the persistent nausea that often follows the anæsthetic. There is no remedy that will always control the vomiting. Usually the vomiting will subside within twelve or, at most, twenty-four hours, if the patient can be kept *very quiet.* The stomach is entirely inert for the first few hours, and there is no peristalsis of the intestine. The smallest quantity of liquid ingested will cause nausea, or at least will not pass on down, and usually will be thrown out of the stomach by vomiting, even though it is retained for a number of hours.

Sometimes a teaspoonful of hot water, or hot milk (in cases of retching), will quiet the patient's stomach temporarily. If there is no nausea or vomiting for twelve hours, the patient may have a very small quantity of hot water and hot milk, the quantity of both being increased gradually until there are signs of a return of peristalsis and digestion, when the food can be rapidly increased. It is a good rule to give only the least quantity of liquid nourishment for the first twenty-four or thirty-six hours. The patient should be as quiet as possible, and I know of no better method to suggest than

the almost constant presence of her physisician for the first day, thereby giving confidence, and assurance that the pain, which she will be certain to experience will soon pass away.

This leads me to the all important question regarding the use of morphia. I do not object to the use of very small doses of morphia—say ⅛ or 1-12 of a grain—hypodermically, two or three times the first twenty-four hours, in connection with strych. sulph. in doses ranging from 1-16 to 1-32 of a grain. The morphia should not be given but one day, but the strych. should be continued in small doses for some time.

Patients with a previous history similar to Nos. 1 and 2, before referred to, should have a bowel movement as soon after the operation as possible.

I should administer in most of these cases a few tablets of calomel, gr. 1-10, and follow these with small doses of mag. sulph., and if there should be no response in due time, then some warm water with an ounce of glycerine into the colon.

When patients have been completely prepared before the operation, there is usually no necessity for moving the bowels before the third or fourth day.

Most all patients suffer from flatulence. The treatment is to excite peristalsis or let out the gas by the use of a soft rectal tube, or the point of a syringe introduced into the rectum. It is important to continue the use of mag. sulph. about every day. It does not usually require a large amount of medicine to keep the bowel contents soluble, but neglect in this line of treatment will cause much anxiety to say the least.

Having gotten the patient past the third or fourth day, with soluble bowels and free peristalsis, and the digestive organs are responding, a normal pulse and temperature, there will occur nothing to cause alarm if the patient has proper care. In other words the patient is convalescing.

Perhaps I should have said more regarding the diet. I find that patients do the best on predigested milk and beef juice. I often have the patient take the juice of three pounds of round steak and two quarts of milk in one day, and later add to this nourishment two or three light meals a day, consisting of toast, eggs, coffee, tea, etc. My patients are bathed every alternate day, and usually sponged with alcohol following the bath. In extremely weak patients they get alcohol baths from one to three times a day. The sutures, if of proper material, should not be disturbed, or even examined, for ten or twelve days. I often leave them in situ for two weeks.

The patient may lie in any position that is most comfortable during her convalescence or after the first twenty-four hours, unless there is some special reason for quietude, such as drainage, etc. No patient should be allowed to sit upright before two weeks; and better still are they when required to remain in bed three weeks.

I heartily recommend the daily use of very warm vaginal douches. Two quarts of warm (almost hot) water used as vaginal douches, will give comfort by diminishing the tenderness caused by the ligated stumps of the broad ligament.

The use of supports to the abdominal wall is of much importance, and should be kept up for at least six months after cœliotomy.

Operation for Strangulated Hernia.

BY J. C. M'CLINTOCK, M. D., TOPEKA, KAS.

I was called early Wednesday morning, November 29, 1893, to see a patient with Dr. R. E. McVey, of Topeka. I found a man of 64, of small weight, stature 130 pounds, who was suffering intensely from abdominal pain, with signs of shock and great prostration. The doctor told me that the patient had had a rupture, right, inguinal, from early childhood, and had worn a truss nearly all the time. While working at his trade the afternoon before (he is a shoemaker) the hernia had slipped down. It was not an unusual occurrence, and he had always been able to replace it himself, but this time he could not make it stay,

as the tumor came down again, seeming to slip out beneath the truss. He was soon in great distress, and sent for help. Upon reaching him early in the evening, Dr. McVey found the hernia, and apparently reduced it, as the patient seemed to get relief. But the Doctor was summoned again in an hour, as the pain had returned with greater violence, and the patient was vomiting at frequent intervals. He reduced the tumor again and administered a hypodermic of morphine. The doctor returned early the next morning and found the tumor just as before. The patient had spent a very bad night, suffering intensely, with almost constant vomiting. Once more the doctor returned the tumor, lifting the hips until he was certain that it passed the internal ring, and he could feel the canal all the way up. He asked the patient to cough, and the hernia again appeared.

I saw the case a half hour later, and upon hearing the history had the patient raised in bed with his feet supported on the shoulders of an assistant, and in this position reduced the tumor completely. Holding the canal with my fingers, I fitted the truss with considerable pressure. The patient seemed to be greatly relieved, and if it had not been that the doctor had done the same thing twice before, I should have expected no further trouble; but in view of his experience we agreed to meet again in three hours to operate if the symptoms were unchanged. At the expiration of that time we found the hernia still reduced, but the patient's symptoms were increasing in severity and an operation was clearly indicated.

After the usual preparations, the patient was placed upon a table and chloroform cautiously administered by Dr. McVey. I had asked the patient to strain as much as possible before getting upon the table, but upon laying open the inguinal canal by an incision fully four inches in length, no sac was visible. I made traction upon the cord and succeeded in drawing the sac down, incised it and exposed a knuckle of intestine strangulated by the peritoneal covering only, but already black from pressure. I relieved the constriction by two quite free incisions, washed off the gut, and upon examination decided that it might be returned to the abdomen. The sac was then ligated and amputated, the canal closed by continuous silk suture, ligatures thrown about the vessels, and the wound closed with all possible speed as the patient was greatly shocked.

The muscles were so attenuated from the long pressure of the truss, and the tissues so unrecognizable, that even if there had been a chance for accurate coaptation and careful closing I would not have expected a radical cure. As it was, an occlusive dressing was quickly applied without drainage and the patient put to bed. The bowels were moved the second day by broken doses of calomel, followed by a saline with the aid of small injections. After that the patient proceeded to an uneventful recovery. The dressings were removed on the eighth day; there was some pus, but no loss of tissue. The wound was dressed every day for three weeks till the ligature had all come away, when it closed completely and the patient was able to be about his business.

I ordered him to obtain a well-fitting, double truss, to be worn continuously, but as yet he has not succeeded in securing a comfortable fit, and has only worn a flannel bandage. He has been at work since the first of January and has experienced no trouble nor has there been any return of the hernia.

Failure of Haffkine's Inoculations.

Medical Record.

A dispatch to the London *Times* from Calcutta, dated September 11, says that during the recent cholera epidemic at Lucknow several soldiers who were inoculated with Dr. Haffkine's virus were attacked, and that the proportion of mortality among them was the same as among ordinary patients. This contradicts the results of the experiments conducted by Drs. Haffkine and Simpson in Calcutta last June. It was then said that few, if any, of those inoculated were attacked by the disease, or if attacked they promptly recovered.

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Topeka, Kansas, Saturday, Sept. 22, 1894.

Castration from a Legal Standpoint.

The agitation of the Winfield affair in the daily newspapers may result in great benefit, not in a political sense, but in enlightening the people upon a subject of much importance to them. Could the public be convinced that by removing the cause, out of imbecility might grow manhood, and out of debauchery and crime might grow honesty and integrity, there would be need of fewer such institutions as that at Winfield. The operation for the emasculation of the sexes loses all its horror when looked upon from a scientific standpoint. The ignorant, irrational or criminal application of any good measure will soon make it obnoxious to the public mind. The emasculation of the female for diseased conditions no longer meets with that disapproval which characterized the first period of its history. The operation upon the male possesses fully as many and as great advantages as are accorded the other. The operation should never be sanctioned by the physician unless it is, in his opinion, the last resort for a cure.

It ought to be resorted to whenever, in the best judgment of the physician, in every case where it is the one remedial cure of a condition or disease that threatens the life or sanity of the person, and without which both would be in danger.

There never has been a thought on the part of the State of enacting laws regulating any particular practice of the physician in the honest discharge of his function. He has always done so untrammeled. The law has made it a crime for a physician, under the pretence of practicing his profession, to commit abortion, and sends him to the penitentiary for so doing; but in all such laws there is a clause that declares it shall be no crime if the same was done in the opinion of the physician to save life. No State by its laws looks after an honorable physician in his practice. He is in every way protected. He can lop a limb, take out an eye, make an exsection, reduce the linear capacity of his intestines, amputate a hand, and he needs neither notify the police or call in the county attorney. The necessity and his intelligence and honor give him that right. And it is just the same with castration for any cause or reason.

Dr. Wilber's statement that there are laws existing to punish the physician who makes the operation is incorrect. There is no such law on the statute books of the world. There could not be so long as reason possesses the legislature.

The physician is above the law, so long as his intelligence and knowledge keeps abreast the state of the art in his profession, so long as he is honorable and does not lend himself as a tool to the vicious for the commission of crime.

The medical authority of a public institution is there to advise and is there to act in all cases where the disease or condition confronts him. And he can act just as any

other honorable and intelligent physician might act in his private practice, with this suggestion: That our institutions are largely in the hands of politicians, and the physician who would expect fair treatment at their hands when it became necessary to do otherwise, is too ignorant of the ways of the world to be at the head of such an institution, and for their own protection it should be upon the pronounced advisement of eminent medical men, proceeded with dignity and done openly; but this is suggested for the personal protection of the physician from the political wolves of all parties, who would at once clamor for his scalp, if party interests were to be subserved thereby.

Speaking about this operation, there are some situations where the Legislature should compel its performance.

A brute who has been guilty of the crime of forcible rape should be prevented from further contaminating our race, and in the neglect to do so there will be trouble with such a fellow three hundred years after he is dead.

The incorrigible criminal, who yields to neither punishment or leniency, often serves his sentence and returns to society, and unless he is served in like manner he will haunt the country with his crime generations after he is dead and forgotten.

Treatment of Gonorrhœa.

Dr. Bernard E. Vaugh, in an article recently published in the *Medico-Surgical Bulletin*, comes to the conclusion that gonorrhœa cannot be aborted at the time of the appearance of the discharge. He has used nitrate of silver in solutions of 40 gr. to ℥i without more than temporary benefit. His treatment consists in douching the uretha with hot normal salt solution, then injecting through the catheter dermatal 5 per cent. in splasmint, a mucilaginous substance extracted from Ireland and Iceland moss. He sometimes uses lanoline in place of splasmint. He also uses for injection a solution of ¼ gr. each of iodide and chloride of zinc to the ounce of water.

Opening Exercises Kansas Medical College.

The fifth session of the Kansas Medical College began Tuesday, September 18, in the new college building. The enrollment on the first day of the session more than doubled that of any previous year.

In the evening of the first day a reception was given to the students in the college building. Music, toasts and refreshments were the order of the evening. Mr. Cully, the genial representative of the Kimball Piano Company, placed a fine instrument in the building at the disposal of the guests.

The following program was rendered:

Piano Solo—Mrs. Dietrich.
The New Session—Dr. J. E. Minney.
Piano Solo—Mrs. Frazier.
A Doctor's Dilemma—Dr. S. G. Stewart.
Quartet.
Medical Education—Dr. R. E. McVey.
Instrumental Solo—Miss Tracy.
Bass Solo—Dr. W. N. West.
The Doctor's Troubles—Dr. McCandless.
Piano Solo—Miss Frazier.
The Doctor's Sunshine—Dr. T. W. Peers.
Quartet.
Our New Home—Dr. W. S. Lindsay.
Piano Solo—Miss Tracy.

The toasts were full of life and wit, and many stories were told at the expense of the doctors present. Many good suggestions to the students and many bright predictions for the success of the college and the future of her students characterized the speeches of the evening. In his remarks Dr. R. E. McVey said:

"Novelists and historians are proud of the great events which have occurred among the people of the world. These great events furnish them with something to think about, to talk about, and to write about.

"This evening furnishes an event in the history of the Kansas Medical College of which we are proud—the event of commencing the fifth course of lectures in our own building, which is to be the future home of

the Kansas Medical College.

"It is true this college building is quite modest in comparison with some of the more imposing medical colleges of the East. But scientific medicine is ever modest and unassuming, and quackery ever noisy and empty.

"While the Kansas Medical College has the very best of teachers and all of the latest and most improved facilities for teaching in the way of libraries, laboratories, microscopes and dissecting material, scholarship does not depend wholly upon costly apparatus or splendid cabinets. Every medical student is the architect and builder of his own medical education. The human intellect can only grow by its own action, and by its own action and reaction to its environment it will certainly develop toward perfection. Teachers, libraries and laboratories are only helps. The work belongs to each individual; it is for himself to say whether he will practice scientific medicine or practice thumb. To practice thumb is to practice medicine without understanding the deeper problems which underlie the nature of diseases and their treatment.

"Knowledge is only purchased by steady application and long solitary hours of study and reflection.

"To be a physician is to have a large, comprehensive mind, capable of grasping the deeper laws of nature, of man; the relations of one to the other; a mind well purged of the vulgar prejudices; a conscious dignity of superior intelligence, a perpetual spring of fresh ideas. It is only then that he can say: 'I am content; I am satisfied; I am a physician.'"

After the completion of the program lunch was served. The guests were well satisfied with their entertainment and the hosts delighted with the interest so evidently manifested in the College and its future.

WE have just received a beautifully illustrated pamphlet on the discovery and history of Hot Springs, published by the Missouri Pacific Railroad Company, complimentary to the coming meeting of the Mississippi Valley Medical Association.

Treatment of Valvular Heart Disease.

University Medicine Magazine.

Liebermeister (*Deutsche med. Wochenschrift*, No. 46, 1893) says that as most valvular diseases are incurable, the causal and morbid indications cannot be met. It is only in the relative and functional insufficiency in which an entire cure can sometimes be obtained. In heart disease medicines are to be used only when there are definite indications.

Treatment by digitalis is never to be begun without direct indications. Certain valvular diseases compensate themselves quickly, while it takes a long time for others to do so. The hypertrophy of the heart, so far as relates to its compensation, takes place without artificial interference. The greater the hypertrophy in excess of the necessary compensation, the sooner will degeneration of the heart muscle take place. In stenosis, while compensatory hypertrophy is taking place, every unusual movemen of the heart diminishes this repair. The patient should, therefore, be at absolute rest in bed. It is only when disturbance of circulation takes place before compensation is complete that any special treatment is necessary. When the patient first gets out of bed light gymnastics should be used, first walking on a level and afterwards climbing to a slight extent. It is difficult to determine in special cases just how much exercise to allow, but every sign of palpitation or of dyspnea shows that the safety line has been reached. For the continuance of the compensation the heart muscle must be well.

Large amounts of milk are often necessary for this.

During the sickness, alcoholics are to be entirely forbidden or much cut down. For patients who can choose their surroundings, it is best to live in summer at a height of 1,500 to 3,000 feet in a forest region.

In winter a climate should be chosen in which it is possible to be much in the air. If there is loss of compensation, as shown

by hypertrophy of liver, dropsy, etc., it is of the highest importance that the patient be in bed. The rest without medication is frequently the only treatment necessary. It is impracticable to put the patient to bed, or if the rest alone does not restore the compensation, then digitalis must be used, but the action of this drug will last but a short time, and the author goes so far as to deny it to his patient unless he is at rest in bed. Those who have used digitalis to restore the compensation should return to bed in four weeks, that the compensation may be longer established.

The dose which is necessary to bring about the full action of the drug is from 8 to 24 grains of the substance. This should be administered in from three to five days. It should be stopped when the urine reaches four to six quarts or when vomiting occurs. It is necessary that between the times of administering these large doses that no digitalis at all be given, or the heart muscle will become accustomed to the use of the drug. If digitalis will not act, we must use strophanthus or convallaria. Of the substances which act most on the kidneys calomel in from 3 to 6-grain doses three times daily is the most satisfactory. Diuretin and caffeine may be used where there is great palpitation; cold applications to the heart region are often of the greatest value. In cases of disturbance of compensation of great intensity, especially where there is much edema of the lungs, blood-letting may be employed with the greatest benefit. The greater the cyanosis and filling of external veins the greater the indications for blood-letting.

New Pulmonary Disease—"Pulmonea"

Medical Record.

Dr. J. W. Power, of Caylloma, Peru, says in *The Lancet* that pulmonea is a name given by the native Peruvian miners to an affection of the chest simulating acute pneumonia in the consolidation stage, and might easily be mistaken for it. In these altitudes (15,600 feet) the sudden daily extremes of temperature (75° to 38° F. average) natural to the climate, and the inhalation of the irritating dust of the dry stamps of the mills and smelting fumes, make cases of pulmonea of daily occurrence. Miners with pulmonea will present themselves complaining of inability to work, of a dull pain under the heart and between the shoulders, of cough and sometimes blood spitting, and distress of breathing. Inspection of the chest shows increased and quickened breathing. There is increased vocal fremitus, with marked dullness on percussion, and increased resonance over both lungs at the back of the chest—under, as it were, the seat of pain. Sometimes roughened breathing can be heard, but not tubular. However, there are no febrile symptoms, and the absence of these and the tubular breathing are the only differences between the two affections. I have made necropsie of two men whom I had recently treated for pulmonea, who had died from the effects of mining accidents, and in both cases I found the glands in the posterior mediastinum greatly enlarged, inflamed, and thickened, forming a compact mass in a situation which would just correspond to the seat of pain, and I have no doubt that these glands were the cause of the symptoms and physical signs which I have described. Their condition was probably caused by the irritating matter continually inhaled by the men. With regard to treatment, painting the back with iodine, and syrup of the iodide of iron given internally, with a few days in the fresh air, will remove all the unpleasant symptoms but not the physical signs.

DR. C. H. F. ROUTH says: "The ovary, besides being concerned in ovulation, secretes especially, but in conjuction with other glands, a peculiar principal spermine, which being reabsorbed into the blood is the most useful in its nutritive, oxygenating and recuperative power to maintain the well being of the female, and the want of which leads to bodily and mental debility."

Early Siphilitic Glycosuria.

Maryland Medical Journal.

M. A. Tchistiakoff (*British Medical Journal*) describes in detail an instance of glycosuria occurring in the early stage of siphilis, and rapidly disappearing under the influence of the usual antisiphilitic treatment. Reviewing similar cases recorded in literature (Seegen, Servantie, etc.), he comes to the conclusion that in the course of siphilis there may sometimes develop glycosuria of a benign nature which is characterized by the following clinical features: (*a*) the daily amount of sugar in the urine remains scanty; (*b*) the daily quantity of the urine does not undergo any considerable increase; (*c*) beyond the presence of sugar, the composition of the urine does not show any marked deviation from the normal standard; (*d*) increase of thirst and appetite and emaciation occur within fairly moderate limits; and (*e*) the disturbance is of a more or less fleeting nature, and may subside spontaneously after the eruption of initial cutaneous siphilis. The glycosuria seems to constitute a manifestation and result of a perverted tissue metabolism arising in the earlier period of siphilis.

Bradydiastole.

Prof. Huchard, Rev. Gen. de Clinique et Therap., 1894: No. 23.

The above name is given by the author to a prolongation of the diastolic pause which he considers as being of value in the prognosis of cardiac troubles, and more especially in those which he terms arterial cardiopathies.

This phenomenon is the reverse of what occurs in embryocardia, which, as is well known, is an indication of weakness of the heart with diminution of the arterial tension, and in which the beats are accelerated, both tones having a metallic quality, being too intense, and having an equal duration of both intervals.

The prolongation of the diastolic interval is chiefly found in aortic insufficiency, in mitral stenosis, after the prolonged administration of digitalis, in subjects with a slow pulse; in these conditions the phenomenon is never very marked and can hardly be said to be of decided prognostic value. But, when bradydiastole is found in comatose states, in cerebral hemorrhages, and especially in arterial cardiopathies, it assumes a decided prognostic importance.

The cardiac contractions remain about normal in number, the two sounds are very near together, the short interval is very brief, but the long interval is remarkably protracted. Bradydiastole is generally associated with myocardial lesions, announces a dilatation of the heart, and entails a bad prognosis.

Pathogenesis of Tetanus.

Dr. Gumprecht (Deutsche Medical Wochenschrift, 1894: No. 26; p. 546).

In the pathology of tetanus, according to Gumprecht, there are three points which it is difficult to understand. They are:

1. The general spasms, which develop after an application of the poison.

2. The local spasmodic contraction of the extensors of the affected limb or nerves.

3. The dissemination of the poison in the body.

As regards the general spasms, there is hardly any difference between those resulting from an infection with tetanus and those following strychnine; they are due to an increased reflex irritability of the spinal cord.

In trying to answer the second question, as peripheral action would first be thought of, Gumprecht made a large number of experiments on dogs, in which he cut through all the sensitive nerve roots of one extremity and followed this with an infection of tetanus in the same member. The result showed that local tetanus will follow in an entirely anæsthetic limb after local infection. He thinks that neither the motor end plates nor the muscle itself is changed by the tetanus

poison. This shows that none of the present theories as to the action of tetanus can fully explain what really occurs.

As regards the dissemination of the poison, it probably runs upward along the nerves, and in this way affects the spinal cord locally. So much seems to be certain, that the local as well as the general tetanus is brought on by a toxic affection of the central nervous system. Primarily, nerves and muscles undergo no functional changes; secondarily, they show symptoms of fatigue, a decrease of electric excitability and muscular rigor immediately after death.

Treatment of Peri-Uterine Inflammations.

American Journal of Obstetrics, June, 1894.

Scott: If the condition originates from a septic endometritis, as it so frequently does, the uterus should be curetted, washed out, and a gauze drain introduced up to the fundus.

In the acute and chronic forms, where you do not suspect suppuration to have occurred, the patient should be kept at absolute rest in bed, and have morning and evening hot douches, prolonged from fifteen to twenty minutes. If the bowels are not filled with impacted fæces, it is advisable to keep the patient well under the influence of opiates, to quiet peristalic action.

Painting over a large portion of the abdomen with iodine should be tried, and, though I have never seen it done, I should be in favor of applying six or eight leeches to the portio vaginalis. Ice-cold applications are better than hot poultices; the latter in my estimation favor the growth of septic organisms and hasten suppuration, which might be averted by cold. If there is a gonorrhœal history, the utmost trouble should be taken to prevent its ravages by antiseptics applied to the inner surface of the uterus, even if it has spread there. Diet and tonics, of course, will be attended to; pain will be met by morphia suppositories and opiates; and the temperature will be kept down by sponging with cold water and alcohol, and giving aconite and antipyretics with judgment. The treatment is practically the same whether the condition be pelvic peritonitis, cellulitis, ovaritis, or salpingitis. Cœliotomy will be performed if suppuration has occurred, and in cases of tubercular peritonitis the abdomen should be opened and flushed with hot water freely. Rarely is it advisable to remove the products of suppuration or effusion by an incision from the vagina or by tapping.

The Meeting at Hot Springs, Ark.

H. C. Townsend, General Passenger and Ticket Agent of the Missouri Pacific and Iron Mountain and Southern Railways, has issued the following circular letter of interest to the profession:

"To the Physicians of the United States.

"As already announced, the members of the Mississippi Valley Medical Association will in convention assemble at Hot Springs, Ark, November 20th to 23d, 1894. The widespread enthusiasm awakened in this meeting on account of the selection of Hot Springs as the site, prompts the management of the Iron Mountain Route to advance every effort in making the occasion a pronounced success.

"There is probably not to-day in all these United States a physician who is not cognizant of the wonderful medical properties contained in the waters of these famous Springs, but again there are some who are not aware of the great strides made by the Arkansas Mecca as a pleasure resort in the last few years. Hot Springs to-day is as thoroughly modern as any resort in the country. The old-style structures erected when the place first attracted the attention of the outside world have given way to advanced ideas of architecture which is forcibly noticeable in the magnificent hotels recently constructed.

"The business interests of the city have also kept pace with the new era, and the merchants of Hot Springs now point with pride to their colossal edifices erected for the

comfort and convenience of a rapidly increasing population. While the seasons at the majority of health and pleasure resorts of the new world are governed entirely by climatic conditions, Hot Springs is more fortunate in this respect, and is at home to the invalid and tourist three hundred and sixty-five days in the year.

"How different it is on the Atlantic Coast and up in the Lake Regions of the North; during the Fall months desolation is at every hand, the blustering winds announce the early approach of Winter, the verdue covered plots have retired for at least six months, and the general aspect of nature is anything but inviting.

"Picture Hot Springs: Snugly nestled in the valley of the Ouachita, far below any high winds that might sweep from the summit of the Ozarks, Nature has fittingly adapted her to implore of the sick and well to come to her gates. At the time the learned physicians gather in convention at Hot Springs, during the latter part of November, the place will be a scene of gayety and splendor. The walls of the valley will be decorated with sweet-smelling flowers and tropical plants of vari-hues, and fashion will handle the reins of society. The evenings at the principal hotels will be given up to balls and parties, and the sweet strains of the celebrated orchestras in attendance will go out on the night air. The accommodations offered for the reception of visitors cannot be improved upon, nor can the excellent facilities for treating those who seek relief or permanent cure.

"It is the duty of every physician to familiarize himself with Nature's method of treatment, and no better opportunity can be presented than the one in which he is interested. As an aid in reviewing the early history of Hot Springs, together with the legendary stories attached to it, I take pleasure in transmitting herewith a copy of 'The Discovery of Hot Springs by De Soto,' which please accept with compliments of the Passenger Department of the Iron Mountain Route. The matter contained therein was compiled after a thorough research of the historical libraries of the country, and is as near accurate as such accounts are obtainable to-day. It is my earnest hope that you will carefully peruse its pages, and after absorbing the beauties of this historical and legendary story of the discovery or Nature's greatest Sanitarium, arrange in company with your fellow-physicians and citizens to participate in the pleasures awaiting members of the Mississippi Valley Medical Association during the brief sojourn at Hot Springs. Yours very truly.

H. C. TOWNSEND, G. P. & T. A."

Free Scholarships in the Kansas Medical College.

Two free scholarships have been endowed in the Kansas Medical College. One known as the J. C. McClintock scholarship, and the other as the S. E. Sheldon scholarship. The privileges of these scholarships are open to students under the following conditions, which are prescribed in both:

"This scholarship will be open to any first course white student who furnishes a certificate from his or her preceptor stating that the student is unable to pay the college fees, and provided that the student is otherwise eligible for admission to the college.

"In case there are two or more applicants for the scholarship, it shall be allotted to the student passing the best examinations on the first Monday following the opening of the Kansas Medical College in 1894 before a special committee consisting of the secretary of the college and two members of the Faculty to be appointed by the Dean, said examinations to be in Latin, physics, and English composition."

DR. J. J. SULLIVAN says the tablets of antikamnia and codeine are superior to any other remedy in diminishing the quantity of sugar in the urine and also in diminishing the quantity of urine itself in diabetes mellitus.

ONE of the attending physicians at the World's Fair (Chicago) Hospital, who has a large private practice, reports to us that he uses Chloralamid largely in sedative doses (3 to 5 grains) for nervously exhausted patients, and he claims that it is the most remarkably efficacious remedy he ever used for giving magical relief in sick (nervous) headaches, physical exhaustion and kindred conditions brought about by excitement, optical strain, heat and unusual exercise.

Notice.

Physicians who employ Iron in their practice should be greatly interested in a new iron preparation recently introduced to the medical profession by Frederick Stearns & Co., Detroit, Mich., called Hæmoferrum (Blood Iron). This is a natural proteid compound aseptically prepared from fresh bullock's blood, and put up in 3-grain pilloids (flat pills), with a highly soluble coating. F. Stearns & Co. claim their Hæmoferrum to be free from all the objectionable features hitherto attending the administration of iron in other forms, it being extremely soluble, pleasant to the taste, agreeable in odor, is readily and easily assimilated, and neutral in reaction. Furthermore it is non-constipating (a valuable characteristic), non-irritating and non-poisonous, even in large doses.

Wherever introduced it has been warmly received by the medical profession, and has the cordial indorsement of the most prominent physicians in Detroit, in which city it has been thoroughly tested clinically. Dr. Hal C. Wyman, Professor of Surgery in the Michigan College of Medicine, states: "The Pilloids of Hæmoferrum (Stearns') have in my hands proven a splendid tonic. In wards of the Detroit Emergency Hospital we have learned to depend upon them in the preparatory treatment of patients who must unnergo severe surgical operations, and they have proven useful in the establishment of convalescence."

Hæmoferrum is especially valuable in treating cases of anæmia and chlorosis where the blood is deficient in iron. Messrs. Stearns & Co. will take plaasure in mailing samples of the preparation, with full descriptive literature, to all physicians who are interested, and on receipt of ten cents will forward a full sized package containing 100 pilloids, a quantity sufficient for a thorough clinical test. Write them.

WELANDER says the elimination of mercury is accompanied by renal irritation, marked by casts in the urine. The casts increase in proportion to the length of the treatment with mercury, but again disappear soon after its discontinuance.

THERE are a number of extra copies of the proceedings of the Kansas Medical Society on hand, which will be sold to those desiring them at $1.25. Address this office, or the secretary, Dr. G. A. Wall.

PICRATE of ammonium has been used in malaria with marked success. Though it can be used in somewhat larger doses, six grains per day seems to be sufficient.

REPEATED experiments have pretty conclusively shown that crude petroleum is one of the very best applications in diphtheria.

DR. W. D. BIDWELL has removed from Oakland, Cal., to 1421 N. Cascade avenue, Colorado Springs, Colo.

DR. PIERCE, editor of the Kansas City *Medical Index*, made us a pleasant call this week.

DR. LIGGET, of Oswego, has located at Lawrence, Kas.